

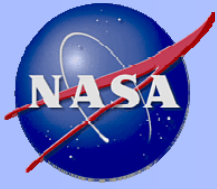
Getting a Handle on Cost and Schedule Performance

Two apparently simple questions that drive project managers crazy.

Mary Beth Zimmerman

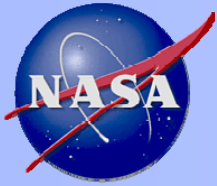
Program Analyst
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NASA Headquarters

PM Challenge 2008 Conference
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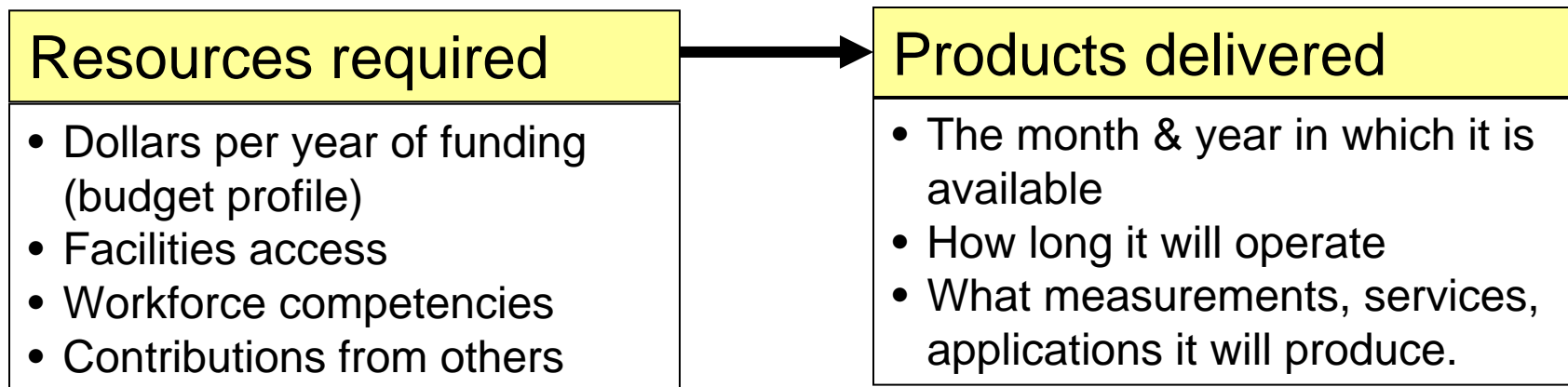
Topics

- Update on Congressional and OMB cost and schedule (C&S) reporting requirements.
- How NASA is Managing C&S reporting.
- Providing cost and schedule estimates for reporting.



The Role of C&S Reporting

- NASA submits budgets that promise results.



- Congress & OMB want to know that:
 - NASA's projects are making progress as planned.
 - NASA is proactively managing problems when they arise.
 - There are no surprise invoices in the mail.



Why This Is So Important to Congress and OMB

Cost growth means the something we promised doesn't get funded. For example:

\$ 400 M in cost growth is the equivalent of eliminating a planned new Explorer Mission.

\$ 17 M in cost growth is the equivalent of reducing Planetary R&A awards by 10% for a year.

Beyond NASA, in a typical day, a Congressman might get requests for:

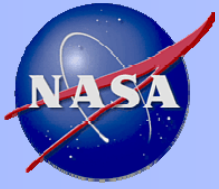
\$ 40 M to increase the federal government's investment in Wind energy R&D by 10% for a decade.

\$ 21 M increase in Pell Grants to allow an 700 additional low income students to receive their BA

\$ 35 M to double the size of EPA's Surface Water Quality Monitoring Program for five years.

\$ 10 M to provide weatherization for 1,430 additional low income families.

Overruns hurt the Agency's reputation in the long run and place our resources at risk.



Cost and Schedule (C&S) Reporting Overview

- Two primary external customers
 - Congress
 - OMB
- Four types of reports
 - **Baseline ***
 - **Tracking ***
 - **Threshold ***
 - Notification of action
- Two reporting levels
 - **Project ***
 - Contract

** Focus for this presentation*



What Data are Reported

Schedule

- Key Decision Points (KDPs)
- Key deliveries
- Start and end of prime, extended operations
- Months slip in launch or operational readiness from KDP C

Current Estimated Schedule	
Milestone	Date
KDP A	
KDP B	
KDP C	
Instrument delivery	
S/C delivery	
Begin ATLO	
Launch Readiness Date	
Complete development	
Complete prime ops	
Complete extended ops	
Complete close out	

Cost

- Lifecycle Cost
- Cost by phase
- Cost by year
- Cost by WBS level 2
- % change in cost from KDP C

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Phase/WHS Element	8	15	27	24	7	81
Formulation (A, B)	8	4				
Development (C, D)		11	27	14		52
Aircraft/Spacecraft						0
Payload(s)		8	15	7		30
Systems I&T				2		2
Launch Vehicle/Services						0
Ground Systems		2	10	4		16
Science/Technology						0
Other		1	2	1		4
MO&DA - Prime (E)				10	2	12
MO&DA - Extended * (E')					4	4
Closeout (F)					1	1



Baseline & Tracking Reports

	Any size or phase	> \$75 Total Cost	In development LCC > \$250 M	In formulation LCC > \$250M
Congres	Annual Performance Plan (APP) goals and outcomes	Notify if costs increase by >=10% or of op plan change needed	Major Program Annual Report (MPAR)	Notify prior to development contract
			GAO* reviews	GAO reviews
OMB	Performance Assessment Rating Tool (PART) goals		Update quarterly	Update quarterly after awarding development contract

- APP and MPAR are included in NASA's Budget Request, also called the Integrated Budget and Performance Plan (IBPD)
- GAO (Government Accountability Office) reviews can include Operational System Upgrades and Advanced Technology projects.



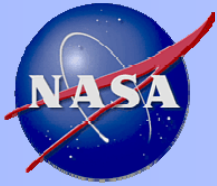
MPAR Cost Tables in the Budget

Development Cost Summary

Project	Base Year	Base Year Development Cost Estimate (\$M)	Current Year	Current Year Development Cost Estimate (\$M)	Cost Change (%)	Key Milestone	Base Year Milestone Date	Current Year Milestone Date	Milestone Change (months)
Phoenix (Scouts 07)	2006	273.6	2007	303.8	11	Launch Readiness	8/30/2007	8/30/2007	0

Development Cost Details

Element	Base Year Development Cost Estimate (\$M)	Current Year Development Cost Estimate (\$M)	Delta
Total:	273.6	303.8	30.2
Spacecraft	92.2	103.8	11.6
Payloads	21.9	29.5	7.6
Systems I&T	6.5	10.9	4.4
Launch Vehicle/Services	77.1	86.2	9.1
Ground Systems	1.3	5.8	4.5
Science/Technology	2.9	10.0	7.1
Other	71.7	57.6	-14.1



MPAR & APP Schedule Tables

Schedule Commitments

Milestone Name	Confirmation Baseline	FY 2007 PB Request	FY 2008 PB Request
<i>Development</i>			
Start Assemble Test & Launch Operations (ATLO)	April 2006	April 2006	April 2006
Launch Readiness	August 2007	August 2007	August 2007
Target arrival	May 2008	May 2008	May 2008
End of prime mission	August 2008	August 2008	August 2008

Annual Performance Goals (APG)		Rating
7SSE7	Successfully launch Poenix 2007 spacecraft	G
8PS07	Land the Phoenix spacecraft on the Martian surface and begin science operations	

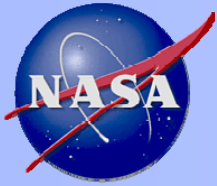


PART Metrics Reporting

Measure: Cumulative percentage of baseline cost overrun for projects under development.

Explanation: On average, the cumulative estimate to complete and completion cost of all the Constellation projects under development will not exceed 10% of the baseline cost.

Year	Target	Actual
2007	Determine Baseline	
2008	<10%	
2009	<10%	
2010	<10%	



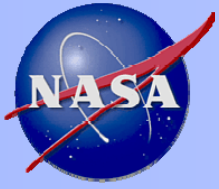
Thresholds Reporting Requirements

Authorization Act of 2005

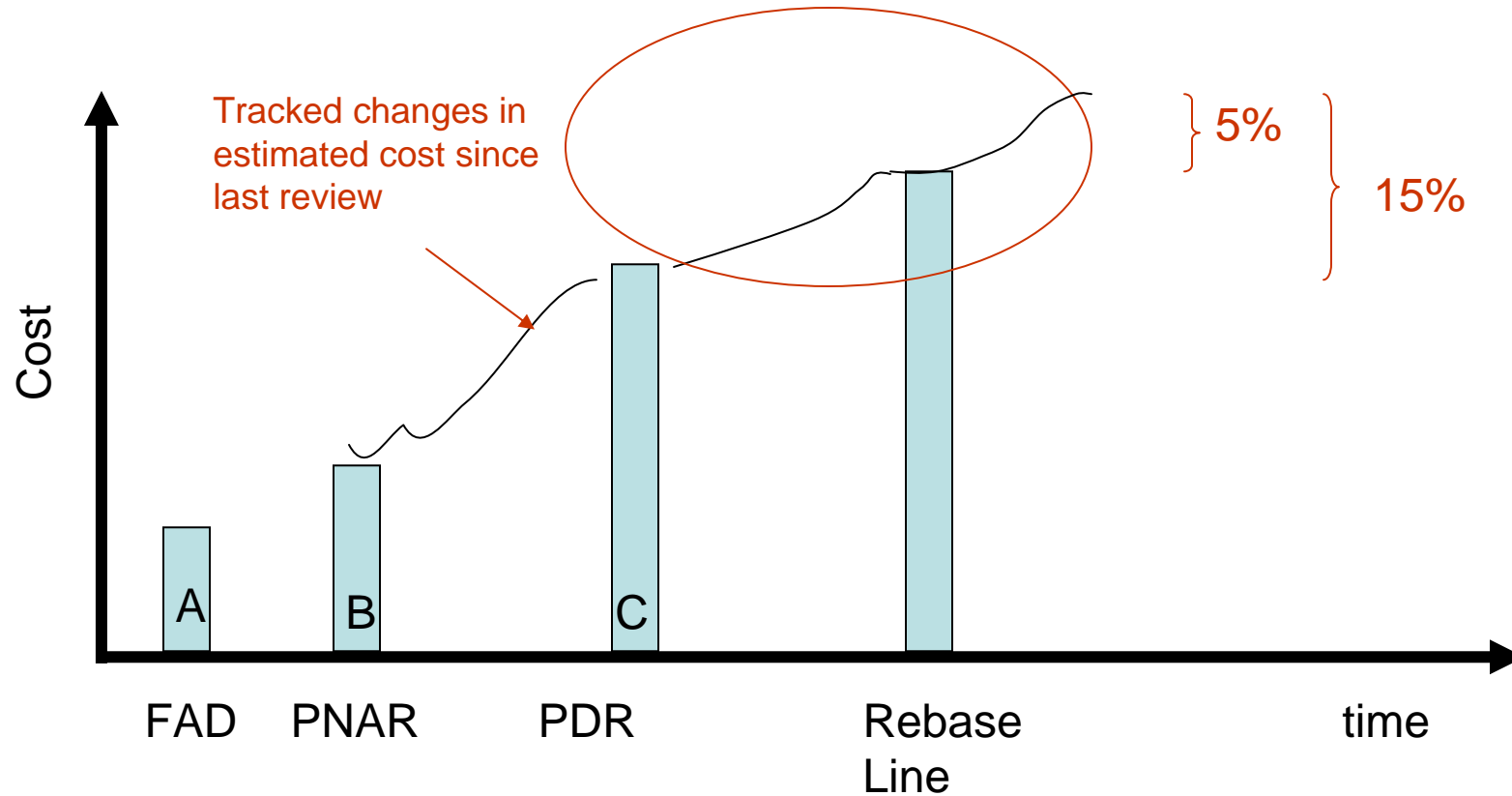
- Percentage change in development cost
- At 15% growth: Threshold and Analysis Reports.
- At 30% growth: Rebaseline Report and a re-authorization by Congress (e.g., via the next appropriations bill)

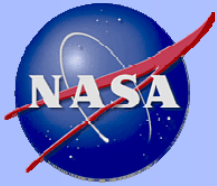
FY 2008 Appropriations Act

- Percentage change in total project cost
- At 10% growth: Notification.



Defining Change from Baseline





How Does Congress Think We Are Doing?

From the just-passed FY 2008 Appropriations Conference Report:

- “The Appropriations Committees reiterate **concern** expressed in the House report **that NASA is not able to anticipate adequately technical problems and project overruns** on existing programs, and are especially concerned that new programs, such as Project Constellation, will encounter similar problems.” (Page 105)
- “The Appropriations Committees are **concerned about standardizing the reporting of cost, schedule and content** for NASA research and development projects including advanced technology and operational systems upgrades.” (Page 108)



What About OMB?

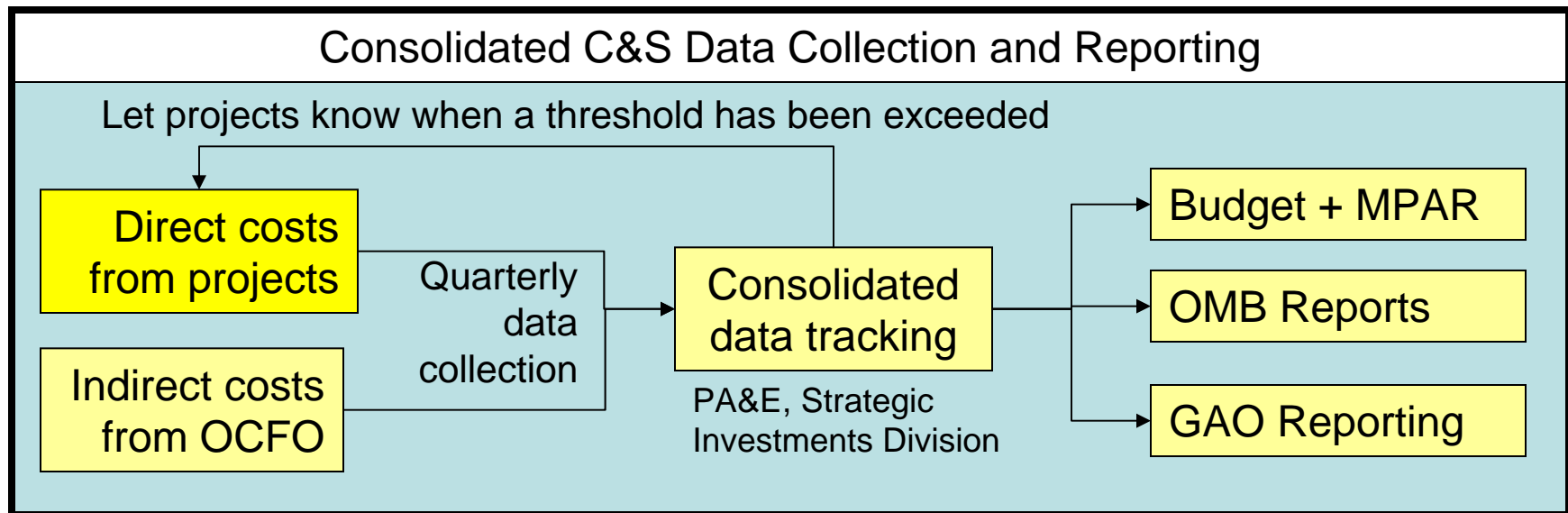
Program Improvement Plans

Year Began	Improvement Plan	Status
2005	Report for major missions on: estimated mission lifecycle cost upon entering development; key schedule milestones associated with each mission phase for those missions formally approved for formulation; mission cost and schedule progress achieved in each phase before entering the next; and any plans to re-baseline lifecycle cost and schedule.	Action taken, but not completed
2007	Improving flight project cost and schedule performance by changing mission plans, scope, partners, and management where appropriate.	No action taken
2007	Improving performance of partners (including grantees, contractors, cost-sharing partners, and other government partners) towards achieving cost and schedule goals.	No action taken



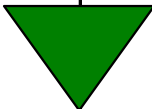
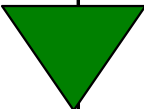
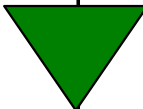
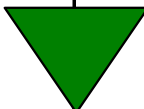
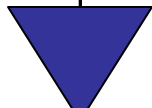
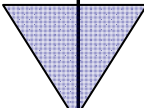
How NASA Is Managing C&S Reporting

- Coordinated budgets and cost reports
- Consolidated data collection
 - Integrated reporting schedule
 - Uniform data collection template
- More consistent definitions & guidance

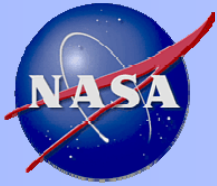




Integrated Reporting Schedule

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Quarterly Reports												
Budget Request												

- Once a quarter we ask you for an updated estimate of your project's cost & schedule.
- The Dec. 30 update = upcoming budget request to Congress.
- Your work on the next budget (POP) cycle will not necessarily be the same as your estimate given your current budget.



Uniform C&S Data Template

	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	TOTAL
Approved 70% CL Estimate at Last KDP																
Full Cost Budget	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Approved Direct Cost LCCE at Last KDP MS																
Direct Cost Budget with MD-held UFE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Direct Costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Formulation *																0.0
Formulation (A, B)																0.0
Development (C, D)																0.0
Project Management																0.0
Systems Engineering																0.0
Safety and Mission Assurance																0.0
Science/Technology																0.0
Payloads																0.0
Spacecraft																0.0
Launch Vehicle/Services																0.0
Ground Systems																0.0
Systems Integration & Test																0.0
Education and Public Outreach																0.0
Mission Operations - Prime (E)																0.0
Mission Operations - Extended (E)																0.0
Disposal (F)																0.0
Project UFE (non-add)																
The indirect cost (orange) cells will be updated by PA&E based on OCFO rates																
Indirect costs assign to project	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Center M&O																0.0
Corporate G&A																0.0
Other indirect costs																0.0
MD or Program-held UFE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Direct																
Indirect																

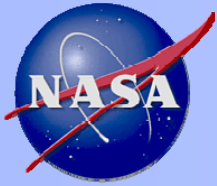
- Minimum reporting data that satisfies baseline and tracking reports.
- Based on NASA's WBS and accounting structures
- Simplifies identifying when reporting thresholds have been met.



Providing Project C&S Estimates

- Cost and schedule estimates are interdependent.
 - Every cost estimate is based on an assumed schedule
 - Always include the key schedule milestones with each cost estimate.
- Every cost estimate is based on an assumed funding profile
 - Your December cost estimate is based on the forthcoming budget.*
 - The remaining quarterly reports delta off of the last budget released, not the one under development.
 - Operating plan changes, *including any resulting changes in out-year costs*, are also reflected in the reports.

**There are exceptions to every rule; SID works with Mission Directorates to square away any anomalies.*



Accounting for Accounting

Obligation authority

- Simply adding actual expenditures-to-date and obligation authority-to-go does not give us the complete LCC.
- In order to keep reported costs aligned with the budget and your POP estimates, the full LCC is tracked in obligation authority.

- Indirect costs

- Given rapid changes in cost accounting, we are keeping direct & indirect cost distinct in tracking cost estimates.
- Projects provide only the direct cost (labor, procurement, travel, any remaining service pool or contracted services) portions of their cost estimates.
- OCFO provides indirect costs or indirect cost rates.
- A single cost estimate may reflect different indirect costs in different years.

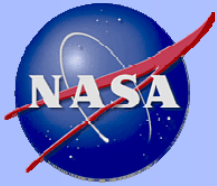
- Unallocated Future Expenses (UFE, aka, reserves)

- Include whatever reserves are also reflected in the project's baseline, even if these are not directly held by the project or included in the project's budget line.
- But let us know where they are held.



Handling Changes in Project Plans

- Congress & OMB intend these reports to provide updated estimates of cost and schedule growth to complete the promised project scope.
- In reality, project plans and scope are often changing for all kinds of reasons.
- If your funding changes:
 - Budgets must report scope that aligns with the amount of funding being requested.
 - Operating plans must describe the impact to the project of a change in funding.
- If your decision authority approves a change in scope for other reasons (external events, technical, performance):
 - Report the C&S required for this new scope.
 - Also report how the scope changed.
- If you are in the middle of re-planning:
 - Quarterly reports to OMB can be TBD for a quarter.
 - Budgets must be produced with the best estimate possible.



Beyond the Numbers

- Threshold reporting require the Agency to explain C&S growth and what's being done about it.
 - Document the reasons for changes to your estimates.
 - Start Threshold analyses as soon as you know a report is likely.
 - These reports should be about pro-active management and not blame. For example:
 - How the project responded to funding loss.
 - What steps are being taken to address technical issues.
 - What is being done to avoid the replanned project from encountering the same problems.
- Reducing the chances of having to file a threshold report
 - Maintain a realistic cost-to-go (as distinct from budget-to-go) estimate and schedule-to-go based on work accomplished to date (EVM), allowing smaller problems to be managed before they become larger problems.
 - Going forward, the more realistic your baseline cost and schedule, the less likely it is that you will be producing Threshold, Analysis, and Re-baseline Reports to Congress.



Web Resources

NASA's budgets, strategic plans, and performance reports

- <http://www.nasa.gov/news/budget/index.html>

Government Performance & Results Act (GPRA)

- <http://www.whitehouse.gov/omb/mgmt-gpra/>

PART requirements, reports, and scores:

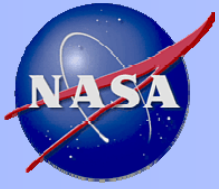
- www.expectmore.gov

FY 2008 Appropriations Act

- <http://www.rules.house.gov/110/text/omni/divb.pdf>

NASA Authorization Act of 2005

- <http://thomas.loc.gov/cgi-bin/query/D?c109:5:./temp/~c1091SX4da::>



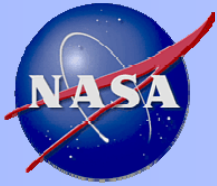
BACKUP





Sources of NASA C&S Reporting Requirements

- Congress
 - Legislation (Authorization & Appropriations)
 - Conference & Committee Reports
 - Government Accounting Office (GAO) Reports
 - NASA works with Committee staff or the Government Accounting Office (GAO) to translate Bill and Report language into workable procedures and detailed requirements.
- White House
 - Presidential Directives & Executive Orders
 - OMB Circulars
 - NASA works with OMB staff to translate Directives Orders, and Circulars into workable procedures and detailed requirements.



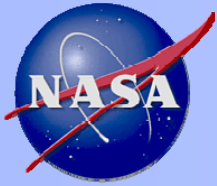
Congressional Requirements

- Government Performance & Results Act (GPRA)
 - Annual Performance Plan (APP) & Performance Accountability Report (PAR)
- 2005 NASA Authorization Act (Sec. 103)
 - Development Contract Notification
 - Major Program Annual Reports (MPAR)
 - Threshold, Analysis, and Re-baseline Reports
- FY2008 Authorization Act & Conference Report
 - Sec 530 Cost Growth Reports
 - NAS review for major program changes
 - GAO Status Reports



OMB / White House Requirements

- National Space Policy Directive (NSPD) 49
 - Quarterly Cost and Schedule Reports
- President's Management Agenda
 - Performance Assessment Rating Tool (PART)
 - Performance Improvement Initiative



MPAR Definitions

Major Program: activity approved to proceed to implementation that has an estimated life-cycle cost of more than \$250,000,000

Life Cycle: the total of the direct, indirect, recurring, and nonrecurring costs, including the construction of facilities and civil servant costs, and other related expenses incurred or estimated to be incurred in the design, development, verification, production, operation, maintenance, support, and retirement of a program over its planned lifespan, without regard to funding source or management control

Development Costs: total of all costs, including construction of facilities and civil servant costs, from the period beginning with the approval to proceed to implementation through the achievement of operational readiness, without regard to funding source or management control, for the life of the program



FY 2008 Appropriations C&S Reporting Provisions

Signed into law: December 26, 2007
Provides NASA's FY 2008 Appropriations

Go to: http://www.rules.house.gov/110_fy08_omni.htm

**“Text of the House Amendments to Senate Amendment to H.R. 2764 State, Foreign Operations,
and Related Programs Appropriations Act, 2008
(Consolidated Appropriations Act, 2008)”**

Look here for C&S reporting provisions:

[Consolidated Appropriations Amendment](#)

[Division B--Commerce, Justice, Science](#)

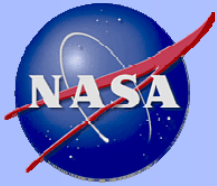
Administrative Provisions, page 80

Sec 150 reporting, page 114

[Joint Explanatory Statement to Accompany Consolidated Appropriations Amendment](#)

[Division B--Commerce, Justice, Science](#)

NASA Provisions begin on page 105



NASA Authorization Act of 2005

S.1281

**National Aeronautics and Space Administration Authorization Act of 2005
(Enrolled as Agreed to or Passed by Both House and Senate)**

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

Sec. 1. Short title; table of contents.

SEC. 2. DEFINITIONS.

TITLE I--GENERAL PRINCIPLES AND REPORTS

SEC. 101. RESPONSIBILITIES, POLICIES, AND PLANS.

SEC. 102. REPORTS.

SEC. 103. BASELINES AND COST CONTROLS.

SEC. 104. PRIZE AUTHORITY.



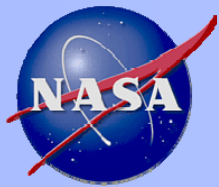
ExpectMore.gov

DETAILED INFORMATION ON THE NASA ASTRONOMY AND ASTROPHYSICS RESEARCH ASSESSMENT

- View this [program's assessment summary](#).
- Visit [ExpectMore.gov](#) to learn more about how Federal Government programs are assessed and their plans for improvement.
- [Learn more](#) about detailed assessments.

Program Code	10002316										
Program Title	NASA Astronomy and Astrophysics Research										
Department Name	Natl Aeronautics & Space Admin										
Agency/Bureau Name	National Aeronautics and Space Administration										
Program Type(s)	Competitive Grant Program										
Assessment Year	2006										
Assessment Rating	Effective										
Assessment Section Scores	<table><tr><th>Section</th><th>Score</th></tr><tr><td>Program Purpose & Design</td><td>100%</td></tr><tr><td>Strategic Planning</td><td>100%</td></tr><tr><td>Program Management</td><td>91%</td></tr><tr><td>Program Results/Accountability</td><td>84%</td></tr></table>	Section	Score	Program Purpose & Design	100%	Strategic Planning	100%	Program Management	91%	Program Results/Accountability	84%
Section	Score										
Program Purpose & Design	100%										
Strategic Planning	100%										
Program Management	91%										
Program Results/Accountability	84%										
Program Funding Level (in millions)	<table><tr><td>FY2006</td><td>\$451</td></tr><tr><td>FY2007</td><td>\$378</td></tr><tr><td>FY2008</td><td>\$1,516</td></tr></table>	FY2006	\$451	FY2007	\$378	FY2008	\$1,516				
FY2006	\$451										
FY2007	\$378										
FY2008	\$1,516										

- [Program Improvement Plans](#)
- [Program Performance Measures](#)
- [Questions/Answers \(Detailed Assessment\)](#)



PART C&S Reporting: Grant Awards

Annual Efficiency **Measure:** Number of days to make research award selections.

Explanation: Measures the time from deadline for receipt of proposals to mailing of awards notification letters for 80% of award selections.

Year	Target	Actual
2005	Establish baseline	237
2006	FY05 - 5%	231 (-2.5%)
2007	FY06 - 5%	

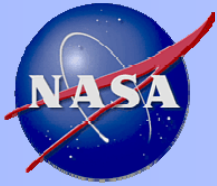


PART C&S Report: Facilities

Efficiency **Measure:** ATP ground test facilities are available and operational in order to support the research, development, test and engineering milestones of NASA and DOD programs from both schedule and cost perspectives. This metric is known as "on-time availability."

Explanation: Unscheduled facility down-time, often caused by unplanned maintenance and repairs, results in lost revenue and not meeting contractual commitments to various facility customers (NASA, other government agencies, industry). The cost to operate/run the ATP facilities is roughly \$500K each day. These costs can be reimbursed during active testing. Therefore, it is in the best interest of ARMD and the agency to do strategic facility maintenance in order to reduce the Deferred Maintenance liability for ATP facilities and maximize facility on-time availability. The cumulative effect of doing annual maintenance is what translates into an efficiency for the ATP facilities. The target is % on-time availability based on a fixed annual maintenance investment.

Year	Target	Actual
2005	NA	83%
2006	90%	93%
2007	94%	
2008	94%	
2009	94%	
2010	96%	
2011	96%	
2012	96%	

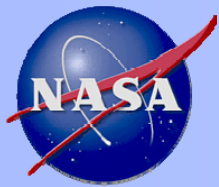


PART C&S Reporting: CPI

Efficiency **Measure:** Annual Cost Performance Index (CPI)

Explanation: The Cost Performance Index is the ratio of the value of the work accomplished versus the actual cost of the work accomplished. A ratio of 1 indicates the cumulative value of work accomplished within the fiscal year matches the costs accrued in the performance of the work during the same period. Since the value of the work accomplished is tied to planning assumptions, a CPI close to 1 is desirable because it shows efficiency in performance versus planning. A CPI ≥ 1 represents the ideal condition and is the target for this measure. *For a CPI < 1 , an improvement goal of ?? % over the previous year's within-FY cumulative CPI is desired as a means of spurring performance toward the ideal.

Year	Target	Actual
2007	CPI ≥ 1 * see exp	
2008	CPI ≥ 1 * see exp	
2009	CPI ≥ 1 * see exp	
2010	CPI ≥ 1 * see exp	

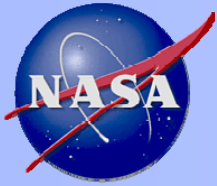


PART C&S Reporting: Review Milestones

Outcome **Measure:** Accomplish key Crew Exploration Vehicle (CEV) and Crew Launch Vehicle (CLV) development and technology activities.

Explanation: FY 2006 - Competitively award contract(s) for Phase A & Phase B design & flight demo of the CEV; FY 2007 - Complete System Design Review (SDR), complete Pre-Non-Advocate Review (PNAR); FY 2008 - Complete Preliminary Design Review (PDR) for CEV & CLV First Stage; FY 2009 Complete Critical Design Review (CDR) for CEV & CLV First Stage; FY 2010 - initiate acceptance of CLV flight test hardware; FY 2011 - initiate CLV flight test preparations for FY 2012.

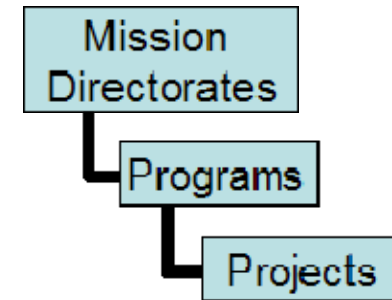
Year	Target	Actual
2006	Award CEV contracts	August 2006
2007	Complete SDR	
2008	PDR for CEV & CLV	
2009	CDR for CEV & CLV	
2010	CLV hardware	
2011	CLV flight test prep	



NASA WBS

2.1 Defining Programs and Projects

2.1.1 . . . This hierarchical relationship of programs to projects shows that programs and projects are different, and their management involves different activities and focus. The following definitions are used to distinguish the two:



- a. **Program** – a strategic investment by a Mission Directorate or Mission Support Office that has a defined architecture, and/or technical approach, requirements, funding level, and a management structure that initiates and directs one or more projects. A *program* defines a strategic direction that the Agency has identified as needed to implement Agency goals and objectives.
- b. **Project** – a specific investment identified in a *Program Plan* having defined requirements, a life-cycle cost, a beginning, and an end. A project also has a management structure and may have interfaces to other projects, agencies, and international partners. A project yields new or revised products that directly address NASA's strategic needs.

Source: NPR 7120.5 D



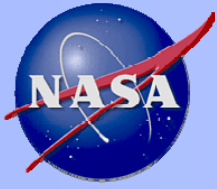
Projects Currently in Reporting

Contract Notices
ARES
Orion

***Threshold Reports for cost and/or schedule growth in process.**

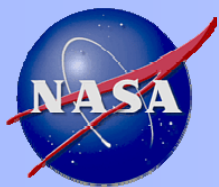
2007 MPAR
Aquarius *
Dawn
GLAST
Glory *
Herschel *
Kepler *
MSL
LRO
NPP *
OCO *
Phoenix
SDO
SOFIA
WISE

OMB Q Reports	
Aquarius	ARES
Dawn	GPM
GLAST	JWST
Glory	LDCM
Herschel	Orion
Kepler	TDRS K&L
MSL	
LRO	
NPP	
OCO	
Phoenix	
SDO	
SOFIA	
WISE	



Example 2007 MPAR Summary Report

Project	Base Year	Base Year Development Cost Estimate (\$M)	Current Year	Current Year Development Cost Estimate (\$M)	Cost Change (%)	Key Milestone	Base Year Milestone Date	Current Year Milestone Date	Milestone Change (Months)
NPOESS Preparatory Project (NPP)	2006	604.2	2007	732.4	21	Launch Readiness	4/30/2008	9/30/2009	17
Glory Mission	2007	192.9	2007	192.9	0	Launch Readiness	12/31/2008	12/31/2008	0
Aquarius	2007	215.9	2007	215.9	0	Launch Readiness	3/31/2009	3/31/2009	0
Orbiting Carbon Observatory (OCO)	2007	199.3	2007	199.3	0	Launch Readiness	9/30/2008	9/30/2008	0
Solar Dynamics Observatory (SDO)	2006	652.7	2007	672.6	3	Launch Readiness	8/30/2008	8/30/2008	0
Phoenix (Scouts 07)	2006	273.6	2007	303.8	11	Launch Readiness	8/30/2007	8/30/2007	0
2009 Mars Science Lab	2007	1,068.5	2007	1,068.5	0	Launch Readiness	9/30/2007	9/30/2007	0



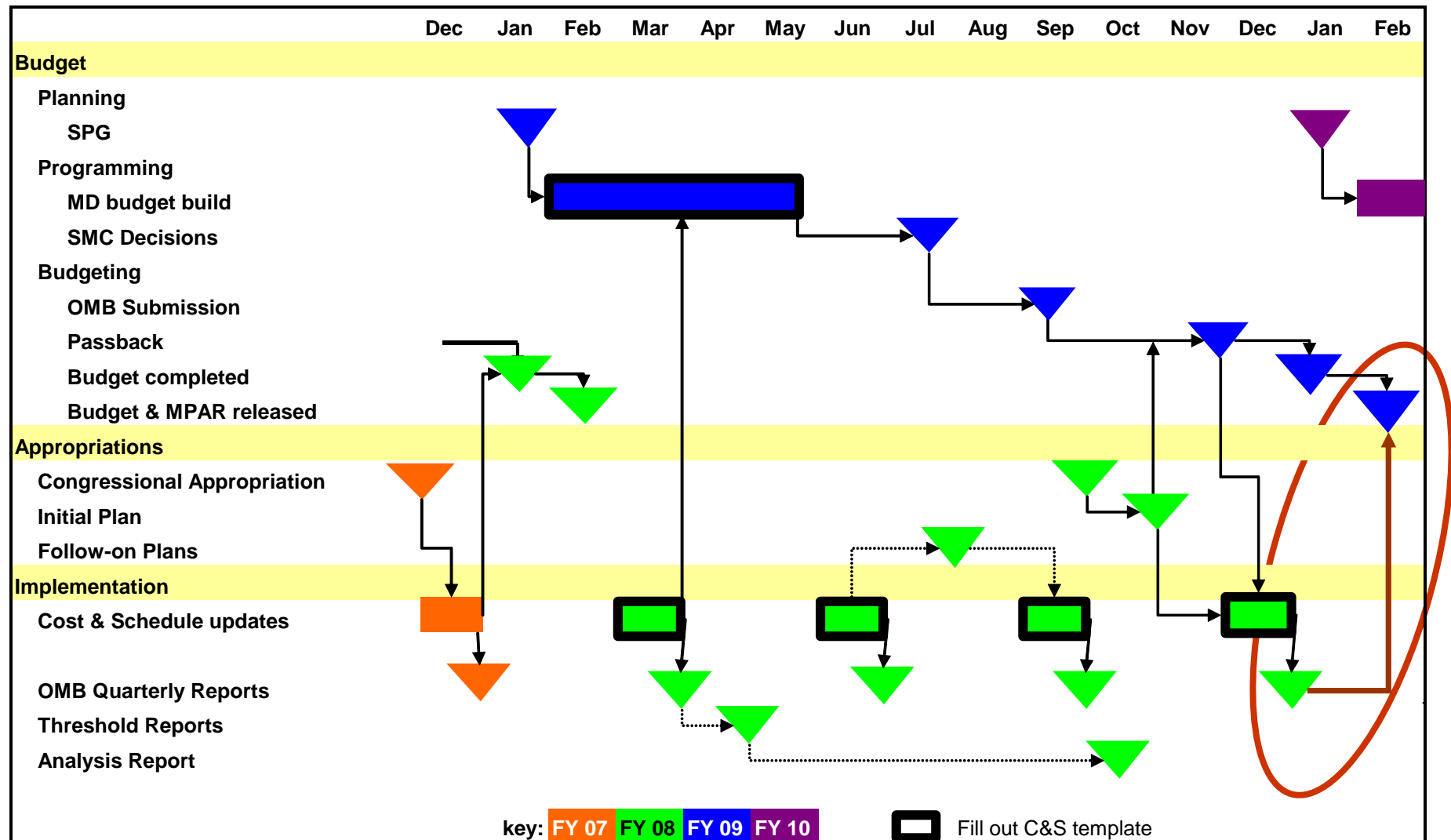
Example Budget Table (Phoenix)

Budget Authority (\$ millions)	Prior	FY06	FY07	FY08	FY09	FY10	FY11	FY12	BTC	LCC TOTAL
FY 2008 President's Budget Request	146.5	141.5	99.8	11.4	1.2	--	--	--	--	400.4
Formulation	85.7	--	--	--	--	--	--	--	--	--
Development	60.8	141.5	99.8	--	--	--	--	--	--	--
Operations	--	--	--	11.4	1.2	--	--	--	--	--
Other	--	--	--	--	--	--	--	--	--	--
FY 2007 President's Budget Request	139.6	125.6	90.5	28.6	1.0	--	--	--	--	385.3
Formulation	83.2	--	--	--	--	--	--	--	--	--
Development	56.4	125.6	90.5	--	--	--	--	--	--	--
Operations	--	--	--	28.6	1.0	--	--	--	--	--
Other	--	--	--	--	--	--	--	--	--	--
Changes	7.0	15.9	9.3	-17.2	0.2	--	--	--	--	15.1
Formulation	2.5	--	--	--	--	--	--	--	--	2.5
Development	4.4	15.9	9.3	--	--	--	--	--	--	29.6
Operations	--	--	--	-17.2	0.2	--	--	--	--	-17.0
Other	--	--	--	--	--	--	--	--	--	--

Note: FY 2007 column represents the 2007 President's Budget in full-cost simplification and shown in the new Theme structure.



Budget and C&S Reporting Coordination





Treatment of Indirect Cost

Table A-1: Funding components for FY 2008 President's Budget

	FY03, prior	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 09 & out
FY 2007 PB	Direct: Procurement	Direct: Procurement Labor Travel Service Pools	Direct: Procurement Labor Travel Service Pools	Direct: Procurement Labor Travel Service Pools	Direct: Procurement Labor Travel Service Pools	Direct: Procurement Labor Travel Service Pools	Direct: Procurement Labor Travel Service Pools
	Indirect: None	Indirect: Center G&A (rates vary by center) Corp G&A	Indirect: Center G&A (rates vary by center) Corp G&A	Indirect: Center G&A (rates vary by center)	Indirect: Center G&A (rates vary by center)	Indirect: Center G&A (rates vary by center)	Indirect: Center G&A (rates vary by center)
FY 2008 PB	Direct: Procurement	Direct: Procurement Labor Travel Service Pools	Direct: Procurement Labor Travel Service Pools	Direct: Procurement Labor Travel Service Pools	Direct: Procurement Labor Travel Service Pools	Direct: Procurement Labor Travel	Direct: Procurement Labor Travel
	Indirect: None	Indirect: Center G&A (rates vary by center) Corporate G&A	Indirect: Center G&A (rates vary by center) Corporate G&A	Indirect: Center G&A (rates vary by center)	Indirect: Center G&A (rates vary by center) Corporate G&A	Indirect: Center G&A w/ most service pools, common rate Corp G&A Institutional Investments	Indirect: Center G&A w/ most service pools, common rate Corp G&A Institutional Investments